

LAMPIRAN 1
BIODATA PENULIS

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Telepon : 085740477604
Hobi : Memelihara ikan hias dan burung kicau
Motto Hidup : Tetaplah berjalan meski pelan



Jenjang	Nama Sekolah	Jurusan	Tahun
SD	SDN MERTASINGA 02	-	(2007-2013)
SMP	SMPN 5 CILACAP	-	(2013-2016)
SMK	SMKN 2 CILACAP	Teknik Pemesinan	(2016-2019)
PERGURUAN TINGGI	POLITEKNIK NEGERI CILACAP	Teknik Mesin	(2019-2024)

LAMPIRAN 2
DETAIL DRAWING

LAMPIRAN 3
TABEL ELEMEN MESIN

Tabel kecepatan potong mesin bubut

KECEPATAN POTONG YANG DIANJURKAN UNTUK PAHAT HSS						
MATERIAL	PEMBUBUTAN DAN PENGEBORAN				PENGULIRAN	
	PEKERJAAN KASAR		PEKERJAAN PENYELESAIAN			
	m/m enit	ft/mi n	m/mi n	ft/min	m/min	ft/min
Baja mesin	27	90	30	100	11	35
Baja perkakas	21	70	27	90	9	30
Besi tuang	18	60	24	80	8	25
Perunggu	27	90	30	100	8	25
Aluminium	61	200	93	300	18	60

Tabel putaran mesin bubut

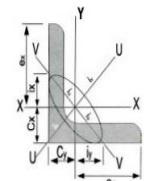
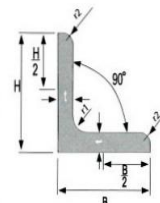
	1	2	3
A	60	220	860
B	92	360	1400
C	140	530	2000

Tabel putaran mesin bubut

EQUAL ANGLE

Metric Size

STANDARD SECTIONAL DIMENSIONS					SECTION AREA A	UNIT WEIGHT			INFORMATIVE REFERENCE							REMARKS	
H	x	B	t	r ₁		r ₂	kg/m	kg/6m	kg/12m	CENTER OF GRAVITY C _x = C _y	GEOMETRICAL MOMENT OF INERTIA			RADIUS OF GYRATION OF AREA			MODULUS OF SECTION Z _x = Z _y
mm	x	mm	mm	mm	mm	cm ²	cm ²	cm ²	cm		I _x = I _y	Max I _u	Min I _v	I _x = I _y	Max I _u		
40	x	40	4	4.5	2	3.080	2.42	14.52	29.04	1.090	3.530	5.60	1.460	1.230	1.55	0.79	1.210
50	x	50	5	6.5	3	4.802	3.77	22.62	45.24	1.410	11.100	17.50	4.580	1.520	1.91	0.98	3.080
50	x	50	6	6.5	4.5	5.644	4.43	26.58	53.16	1.440	12.600	20.00	5.230	1.500	1.88	0.96	3.550
60	x	60	5	6.5	3	5.802	4.55	27.5	55	1.660	19.600	31.20	8.090	1.840	2.32	1.18	4.520
60	x	60	6	6.5	3	6.910	5.42	32.5	65	1.700	22.790	36.16	9.420	1.820	2.29	1.17	5.280
65	x	65	5	8.5	3	6.367	5.00	30	60	1.770	25.300	40.10	10.500	1.990	2.51	1.28	5.350
65	x	65	6	8.5	4	7.527	5.91	35.5	71	1.810	29.400	46.60	12.200	1.980	2.49	1.27	6.260
70	x	70	6	8.5	4	8.127	6.38	38.5	77	1.930	37.100	58.90	15.300	2.140	2.69	1.37	7.330
75	x	75	6	8.5	4	8.727	6.85	41	82	2.060	46.100	73.20	19.000	2.300	2.90	1.48	8.470
80	x	80	6	8.5	4	9.230	7.32	43.9	87.8	2.180	56.400	89.60	23.200	2.460	3.10	1.58	9.700
90	x	90	7	10	5	12.220	9.59	57.6	115.2	2.460	93.000	148.00	38.300	2.760	3.48	1.77	14.200
90	x	90	10	10	7	17.000	13.30	80	160	2.570	125.000	199.00	51.700	2.710	3.42	1.74	19.500
100	x	100	7	10	5	13.620	10.70	64	128	2.710	129.000	205.00	53.200	3.080	3.88	1.98	17.700
100	x	100	10	10	7	19.000	14.90	89.5	179	2.820	175.000	278.00	72.000	3.040	3.83	1.95	24.400
120	x	120	8	12	5	18.760	14.70	88	176	3.240	258.000	410.00	106.000	3.710	4.67	2.38	29.500
120	x	120	11	13	6.5	25.370	19.90	119.5	239	3.300	340.000	541.00	140.000	3.660	4.62	2.35	39.360
120	x	120	12	13	6.5	27.540	21.60	130	260	3.400	367.000	583.00	151.000	3.850	4.60	2.35	42.680
130	x	130	9	12	6	22.740	17.90	107.4	214.8	3.530	366.000	583.00	150.000	4.010	5.06	2.57	38.700
130	x	130	12	12	8.5	29.760	23.40	140.5	281	3.640	467.000	743.00	192.000	3.960	5.00	2.54	49.900
150	x	150	12	14	7	34.770	27.30	164	328	4.140	740.000	1,180.00	304.000	4.610	5.82	2.96	68.100
150	x	150	15	14	10	42.740	33.60	202	404	4.240	888.000	1,410.00	365.000	4.560	5.75	2.92	82.600
150	x	150	19	14	10	53.380	41.90	251.5	503	4.400	1,090.000	1,730.00	451.000	4.520	5.69	2.91	103.000
175	x	175	12	15	11	40.520	31.80	191	382	4.730	1,170.000	1,860.00	480.000	5.380	6.78	3.44	91.800
175	x	175	15	15	11	50.210	39.40	236.5	473	4.850	1,440.000	2,290.00	589.000	5.350	6.75	3.48	114.000
200	x	200	15	17	12	57.750	45.30	272	544	5.460	2,180.000	3,470.00	891.000	6.140	7.75	3.93	150.000
200	x	200	20	17	12	76.000	59.70	358	716	5.670	2,820.000	4,490.00	1,160.000	6.090	7.68	3.90	197.000
200	x	200	25	17	12	93.750	73.60	442	884	5.860	3,420.000	5,420.00	1,410.000	6.040	7.61	3.88	242.000
250	x	250	25	24	12	119.400	93.70	562	1124	7.100	6,950.000	11,000.00	2,860.000	7.630	9.62	4.89	388.000
250	x	250	35	24	18	162.600	128.00	768	1536	7.450	9,110.000	14,400.00	3,790.000	7.490	9.42	4.83	519.000

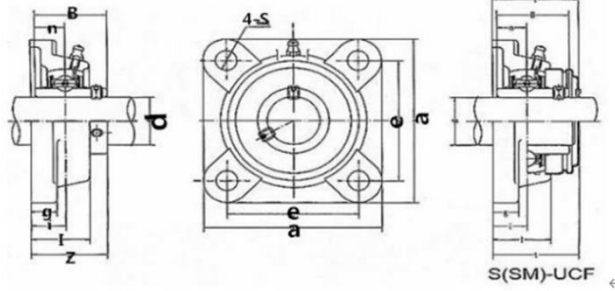
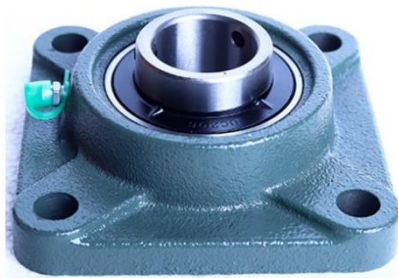


NOTE : Non standard sizes are available upon request and subject to minimum quantity

Tabel putaran mesin gurdi

SPEED CHART . 31					
CAUTION: Change speeds only with the machine stopped					
SPINDLE		12 SPEEDS		MOTOR	
1	2	3	4	5	6
7	8	9	10	11	12
50%	60%	BELT POSITION	50%	60%	BELT POSITION
125	150	4-5	710	850	1-6
185	225	3-5	1000	1200	2-7
210	255	4-6	1250	1500	3-8
300	350	2-5	1350	1600	1-7
350	400	3-6	1900	2300	2-8
420	500	4-7	2500	3000	1-8

Tabel bearing UCF



带座轴承型号 Bearing Unit No.	轴径 Shaft Dia	外型尺寸 Dimensions(mm)									重量 Weight (kg)
	d	A*	E*	i	G*	L*	Z*	S*	n	Bi*	
	mm										
UCF202	15	86	64	15	11	25.5	30.9	12	11.5	27.4	0.56
UCF203	17	86	64	15	11	25.5	30.9	12	11.5	27.4	0.54
UCF 204	20	86	64	15	11	25.5	33.7	12	12.3	31.0	0.61
UCF205	25	95	70	16	13	27.0	35.8	12	14.3	34.1	0.80
UCF206	30	108	83	18	13	31.0	40.2	12	15.9	38.1	1.11
UCF207	35	117	92	19	15	34.0	44.4	14	17.5	42.9	1.66
UCF208	40	130	102	21	15	36.0	51.2	16	19.0	49.2	1.93
UC209	45	137	105	22	16	38.0	52.2	16	19.0	49.2	2.28
UCF210	50	143	111	22	16	40.0	54.6	16	19.0	51.6	2.57
UCF211	55	162	130	25	18	43.0	58.4	19	22.2	55.6	3.98
UCF212	60	175	143	29	18	48.0	68.7	19	25.4	65.1	4.30
UCF213	65	187	149	30	22	50.0	69.7	19	25.4	65.1	5.49
UCF214	70	193	152	31	22	54.0	75.4	19	33.0	74.6	6.47
UCF215	75	200	159	34	22	56.0	78.5	19	33.3	77.8	6.54
UCF216	80	208	165	34	22	58.0	83.3	23	33.3	82.6	7.86
UCF217	85	220	175	36	24	63.0	87.6	23	34.1	85.7	9.77
UCF218	90	235	187	40	24	68.0	96.3	23	39.7	96.0	11.72

LAMPIRAN 4
DOKUMENTASI PEMBUATAN MESIN















